

## REMARKS

### Drawings

The Examiner objected to the drawings under 37 C. F. R. §1.83(a). The Examiner expressed the view that the drawings fail to show reference number 28. The specification was amended to delete reference number 28. The objection to the drawings is thus moot.

### Specification

The Examiner made specific objections to the specification, and suggested amendments which would overcome those objections. Those suggestions have been adopted by the amendment to the specification contained herein. The Examiner's objections to the specification thus are overcome by that amendment. No new matter is sought to be entered by that amendment.

### Claim Rejections - 35 U. S. C § 102

The Examiner rejected claims 1 and 3-7 under 35 U. S. C. § 102. The Examiner relied upon Arm U. S. Patent 2,204,392 (hereinafter Arm) to support this rejection.

The Examiner takes the position that Arm shows a dispenser. Arm does not. Arm shows a hose coupler. Arm, col. 1, lines 1-2. The Examiner takes the position that

“[Arm] can be used to dispense material including an opening (the outlet to member 5 on the right side), where the material is discharged and a conduit (5, 21) through which the material is transported from (sic--from) a source (the invention of Arm can be used in a fire hose which inherently includes a source (line 39), the conduit including a seal member (23, 24), a first member (section 21 on the left) including a first reducer section and a first feature (the groove that accommodates the seal member 23), and a second member (21 on the right) including a first expander section and a second feature (the groove that accommodates the seal member 24), the first and second features cooperation (sic--cooperating) to define a space for the seal member (23, 24) between the first reducer section and the first expander section (figure 2). The second member is downstream from the first member in the flow of material.”

As the Examiner concedes, Arm includes two seal members 23 and 24. The first feature (the groove 21 that accommodates the seal member 23) and the second feature (the other groove 21 that accommodates the seal member 24) of Arm, as defined by the

Examiner, thus do not cooperate to define a space for *a* seal member. Rather, each feature (groove 21 that accommodates the seal member 23, groove 21 that accommodates the seal member 24) of Arm defines a space for *its own separate* seal member 23, 24. For at least these reasons, Applicants submit that independent claim 1 distinguishes patentably from Arm, and further that, since independent claim 1 distinguishes patentably from Arm, dependent claims 3-7, which depend directly or indirectly from claim 1, patentably distinguish from Arm as well. Accordingly, Applicants submit that the 35 U. S. C. § 102 rejection of claims 1 and 3-7 is overcome. Further favorable consideration, culminating in allowance of claims 1 and 3-7 is respectfully requested.

### 35 U. S. C. § 103 Rejection

The Examiner rejected claims 1-16 (sic--1-14, claims 15 and 16 having previously been cancelled without prejudice) under 35 U. S. C. § 103. The Examiner relied upon the combination of LeCompte U. S. Patent 5,704,825 (hereinafter LeCompte) and Arm to support this rejection. The Examiner takes the position that

“LeCompte shows a dispenser (20) for dispensing pulverulent coating material including an opening (44) through which the pulverulent material is discharged and a conduit (12, 40) through which the pulverulent material is transported from a source (column 3, lines 14-5(sic)), a second reducer section (28, 30) and a second expander section (26, 36) coupled to the second reducer section, the second expander section downstream in the flow of the pulverulent material form (sic--from) the second reducer section, but does not specifically disclose that the dispenser includes a seal member, a first member including a first reducer section and a first (sic), and a second (sic) including a first expander section and a second feature, the first and second features cooperation (sic--cooperating) to define a space for the seal member between the first reducer section and the first expander section with the second member is (sic) downstream from the first member in the flow of material. However, Arm shows a hose and pipe quick disconnect coupler that includes a seal member (23, 24), a first member (section 21 on the left) including a first reducer section and a first feature (the groove that accommodates the seal member 23), and a second member (21 on the right) including a first expander section and a second feature (the groove that accommodates the seal member 24), the first and second features cooperation (sic--cooperating) to define a space for the seal member (23, 24) between the first reducer section and the first expander section (figure 2). The second member is downstream from the first member in the flow of material. Therefore, it would have been obvious to one of ordinary skill

in the art at the time of the applicant's (sic) invention to add the quick disconnect coupler, of Arm, including the seal member and the first reducer and expander sections, to the conduit (12) of LeCompte, upstream of and (sic) the second reducer section (28, 30) so that the nozzle can be easily removed from the source in order to clean and/or replace it."

First, neither LeCompte nor Arm is analogous art.

Two criteria have evolved for determining whether prior art is analogous: (1) whether the art is from the same field of endeavor, regardless of the problem addressed, and (2) if the reference is not within the field of the inventor's endeavor, whether the reference still is reasonably pertinent to the particular problem with which the inventor is involved (citing In re Deminski, 796 F.2d 436, 442, 230 USPQ 313, 315 (Fed. Cir. 1986); In re Wood, 599 F.2d 1032, 1036, 202 USPQ 171, 174 (CCPA 1979)). In re Clay, 966 F.2d 656, 23 USPQ2d 1058, 1060.

In Clay, the issue was whether a reference (Sydansk) which disclosed a process using a gel for reducing the permeability of hydrocarbon-bearing formations (useful in the recovery of oil from an oil field, for example) was analogous art to Clay's claimed process for using a similar gel to fill a dead volume in the bottom of a liquid hydrocarbon storage tank. Clay, supra. The Court observed that

Sydansk cannot be considered to be within Clay's field of endeavor merely because both relate to the petroleum industry. Sydansk teaches the use of a gel in unconfined and irregular volumes within generally underground natural oil-bearing formations to channel flow in a desired direction; Clay teaches the introduction of gel to the confined dead volume of a man-made storage tank. The Sydansk process operates in extreme conditions, with petroleum formation temperatures as high as 115°C and at significant well bore pressures; Clay's process apparently operates at ambient temperature and atmospheric pressure. Clay's field of endeavor is the storage of refined liquid hydrocarbons. The field of endeavor of Sydansk's invention, on the other hand, is the extraction of crude petroleum. The Board clearly erred in considering Sydansk to be within the same field of endeavor as Clay's. Clay, supra., emphasis the Court's.

The Court noted that

Even though the art disclosed in Sydansk is not within Clay's field of endeavor, the reference may still properly be combined with Hetherington [another reference] if it is reasonably pertinent to the problem Clay attempts to solve. In re Wood, 599 F.2d at 1036, 202 USPQ at 174. A reference is reasonably pertinent if, even though it may be in a different field from that

of the inventor's endeavor, it is one which, because of the matter with which it deals, logically would have commended itself to an inventor's attention in considering his problem. Clay at 1060-61.

The Court analyzed Sydansk's pertinence to the problem Clay was trying to solve, observing that

Sydansk's gel treatment of underground formations functions to fill anomalies so as to improve flow profiles and sweep efficiencies of injection and production fluids through a formation, while Clay's gel functions to displace liquid product from the dead volume of a storage tank. Clay at 1061, footnote omitted,

and concluded that

A person having ordinary skill in the art would not reasonably have expected to solve the problem of dead volume in tanks for storing refined petroleum by considering a reference dealing with plugging underground formation anomalies. The Board's finding to the contrary is clearly erroneous. Since Sydansk is non-analogous art, the rejection over Hetherington in view of Sydansk cannot be sustained. Clay, supra.

In State Contracting & Eng'g Corp., in a jury trial before it, the district court had failed to make findings and enter conclusions as to the meanings of terms in claims, what art was relevant to the determination of obviousness, and related questions. In remanding the case to the district court for proceedings not inconsistent with its opinion, the Federal Circuit noted that

[w]hether a claim is invalid for obviousness is a legal conclusion that is based on underlying questions of fact. Beckson Marine, 292 F.3d at 725. The underlying factual inquiries include the scope and content of the prior art; the differences between the claimed invention and the prior art; the level of ordinary skill in the art; and objective evidence of nonobviousness, including commercial success, copying, and long-felt need. See Graham v. John Deere Co., 383 U.S. 1, 17-18 [148 USPQ 459](1966).

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A prerequisite to making a finding on the scope and content of the prior art is to determine what prior art references are pertinent. In re Clay, 966 F.2d 656, 658 [23 USPQ2d 1058](Fed. Cir. 1992). Whether a prior art reference is analogous is a question of fact. Id. A reference is analogous if it is from the same field of endeavor as the invention. Id. at 658-59. Similarity in the structure and function of the invention and the prior art is indicative that the prior art is within the inventor's field of endeavor. In re Deminski, 796 F.2d 436, 442

[230 USPQ 313] (Fed. Cir. 1986). If a reference is outside the inventor's field of endeavor, it is still analogous art if the reference "is reasonably pertinent to the particular problem with which the inventor is involved." Clay, 966 F.2d at 659.

\* \* \*

Upon review of the record, we conclude that there are factual questions as to the scope of the prior art references and the differences between the prior art and the claimed invention, as well as whether there was a "motivation, teaching, suggestion, or reason" to combine the prior art references to derive the patented inventions. See *Gambro Lundia AB v. Baxter Healthcare Corp.*, 110 F.3d 1573, 1579 [42 USPQ2d 1378] (Fed. Cir. 1997).

In particular, there is a factual question as to the scope of the Kubota and Raymond references. A finder of fact could understand Kubota to disclose integrating a steel tube having reinforcing bars with a concrete pile by penetrating the steel tube and bars into concrete in an excavation pit before the concrete hardens. A finder of fact could understand Raymond, which discloses a concrete (page 1491) column with reinforcement, to teach the use of an auger in forming the ground situs, as provided in claim 2 of the '288 patent.

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To be sure, claim construction may narrow those factual issues. Because the trial court has not yet construed the critical limitations, we leave that task to the court on remand. The question whether there is a motivation to combine the pertinent elements of the prior art references in a manner that would read on the asserted claims depends, in turn, on the resolution of the factual questions and claim construction issues discussed above. If those issues are resolved in the contractors' favor, the evidence in the record, such as Mr. Tamaro's testimony that the decision to insert the columns before adding cementitious slurry was simply a scheduling decision, is sufficient to raise a factual question as to the presence of a motivation or suggestion to combine the elements of the prior art.

State Contracting & Eng'g Corp., at 1489-1491.

In In re Oetiker, 977 F.2d 1443, 24 USPQ2d 1443 (Fed. Cir. 1992), the Court reversed the Board's reasoning and held that the Board erred in finding that "all hooking problems are analogous." Id. at 1445 The Court noted that

[i]n order to rely on a reference as a basis for rejection of the applicant's invention, the reference must either be in the field of the applicant's endeavor or, if not, then be reasonably pertinent to the particular problem with which the inventor was concerned. See In re Deminski, 796 F.2d 436, 442, 230 USPQ

313, 315 (Fed. Cir. 1986). Patent examination is necessarily conducted by hindsight, with complete knowledge of the applicant's invention, and the courts have recognized the subjective aspects of determining whether an inventor would reasonably be motivated to go to the field in which the examiner found the reference, in order to solve the problem confronting the inventor. We have reminded ourselves and the PTO that it is necessary to consider "the reality of the circumstances," In re Wood, 599 F.2d 1032, 1036, 202 USPQ 171, 174 (CCPA 1979) - in other words, common sense - in deciding in which fields a person of ordinary skill would reasonably be expected to look for a solution to the problem facing the inventor.

It has not been shown that a person of ordinary skill, seeking to solve a problem of fastening a hose clamp, would reasonably be expected or motivated to look to fasteners for garments. The combination of elements from non-analogous sources, in a manner that reconstructs the applicant's invention only with the benefit of hindsight, is insufficient to present a prima facie case of obviousness.

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We conclude that the references on which the Board relied were improperly combined. Accordingly, the Board erred in holding the claims unpatentable under section 103. The rejection of claims 1-4 and 16-21 is REVERSED.

Oetiker at 1445-46. (emphasis added)

In Wang Laboratories, Inc., the court held that, even though a prior patent and the subject patents all relate to the same computer memories, they are not in the same field of endeavor, because the prior patent "involves memory circuits in which modules of varying sizes may be added or replaced; in contrast, the subject patents teach compact modular memories." Wang Laboratories, Inc., 993 F.2d at 864. The court further held that the prior art was not reasonably pertinent because the subject patents deal with memories used in personal computers whereas the prior art deals with a memory circuit for a large, more costly industrial controllers. *Id.* at 864-865. The court concluded that the subject patents were non-analogous to the prior art patent. *Id.*

As in the court's discussion in Wang Laboratories, Inc., because the present invention and Arm are not in the same field of endeavor and Arm is not reasonably pertinent to the present invention, Arm is non-analogous to the present invention. Therefore it would not have been obvious to one of ordinary skill in the art at the time of the invention to apply the teachings of Arm relating to hose and pipe couplers (Arm, col. 1, lines 1-2) to a low profile seal assembly to reduce powder accumulation on and around the seal between a robot

arm and a coating powder dispensing gun.

LeCompte's invention is used in abrasive blasting for removing, *inter alia*, coating materials. Applicants' claims 1 and 14, from which the remaining claims depend either directly or indirectly, both recite "A dispenser for dispensing pulverulent *coating material*." Claim 1, line 1; claim 14, line 1. Emphasis Applicants'. It is neither LeCompte's goal nor does LeCompte teach or disclose to achieve a distribution of powder coating materials. A person having ordinary skill in the art would not reasonably have expected to solve the problem of coating powder accumulation inside a powder delivery tube by considering a reference dealing with sand blasting for "removing rust, scale, old paint, debris and contamination from a surface prior to cleaning, repainting or applying a similar surface coating." The combination of elements from non-analogous sources, in a manner that reconstructs Applicants' invention only with the benefit of hindsight, is insufficient to present a *prima facie* case of obviousness.

Further, and as noted above, contrary to the Examiner's assertion, the first feature of Arm (the groove 21 that accommodates the seal member 23) and the second feature of Arm (the other groove 21 that accommodates the seal member 24) do not cooperate to define a space for the seal member. Rather, each feature (groove 21 that accommodates the seal member 23, groove 21 that accommodates the seal member 24) of Arm defines a space for its own separate seal member 23, 24. Thus, even assuming LeCompte and Arm were properly combinable (an assumption Applicants vigorously dispute), the combination would still be missing this element of claim 1, and claims 2-13 which depend directly or indirectly from claim 1.

Still further, the Examiner provides no reasoning why combining LeCompte and Arm in any manner, let alone the manner suggested by the Examiner, would be a good idea, or why anyone would be motivated to do it, other than "so that the nozzle can be easily removed from the source in order to clean and/or replace it." LeCompte's nozzle screws onto its conduit, and so is already "easily removed from the source in order to clean and/or replace it." Arm's device is a pipe or hose coupler, so it is itself already the thing that makes easy removal and replacement possible. Applicants can only conclude that the motivation to combine LeCompte and Arm in the manner the Examiner has suggested comes from Applicants' claims.

When patentability turns on the question of obviousness, the search for and analysis of the prior art includes evidence relevant to the finding of whether there is a teaching, motivation, or suggestion to select and combine the references relied on as evidence

of obviousness. See, e.g., McGinley v. Franklin Sports, Inc., 262 F.3d 1339, 1351-52, 60 USPQ2d 1001, 1008 (Fed. Cir. 2001) (“the central question is whether there is reason to combine [the] references,” a question of fact drawing on the Graham factors).

“The factual inquiry whether to combine references must be thorough and searching.” Id. It must be based on objective evidence of record. This precedent has been reinforced in myriad decisions, and cannot be dispensed with. See, e.g., Brown & Williamson Tobacco Corp. v. Philip Morris Inc., 229 F.3d 1120, 1124-25, 56 USPQ2d 1456, 1459 (Fed. Cir. 2000) (“a showing of a suggestion, teaching, or motivation to combine the prior art references is an 'essential component of an obviousness holding'”) (quoting C.R. Bard, Inc., v. M3 Systems, Inc., 157 F.3d 1340, 1352, 48 USPQ2d 1225, 1232 (Fed. Cir. 1998)); In re Dembiczak, 175 F.3d 994, 999, 50 USPQ2d 1614, 1617 (Fed. Cir. 1999) (“Our case law makes clear that the best defense against the subtle but powerful attraction of a hindsight-based obviousness analysis is rigorous application of the requirement for a showing of the teaching or motivation to combine prior art references.”); In re Dance, 160 F.3d 1339, 1343, 48 USPQ2d 1635, 1637 (Fed. Cir. 1998) (there must be some motivation, suggestion, or teaching of the desirability of making the specific combination that was made by the applicant); In re Fine, 837 F.2d 1071, 1075, 5 USPQ2d 1596, 1600 (Fed. Cir. 1988) (“teachings of references can be combined only if there is some suggestion or incentive to do so.”) (emphasis in original) (quoting ACS Hosp. Sys., Inc. v. Montefiore Hosp., 732 F.2d 1572, 1577, 221 USPQ 929, 933 (Fed. Cir. 1984)).

The need for specificity pervades this authority. See, e.g., In re Kotzab, 217 F.3d 1365, 1371, 55 USPQ2d 1313, 1317 (Fed. Cir. 2000) (“particular findings must be made as to the reason the skilled artisan, with no knowledge of the claimed invention, would have selected these components for combination in the manner claimed”); In re Rouffet, 149 F.3d 1350, 1359, 47 USPQ2d 1453, 1459 (Fed. Cir. 1998) (“even when the level of skill in the art is high, the Board must identify specifically the principle, known to one of ordinary skill, that suggests the claimed combination. In other words, the Board must explain the reasons one of ordinary skill in the art would have been motivated to select the references and to combine them to render the claimed invention obvious.”); In re Fritch, 972 F.2d 1260, 1265, 23 USPQ2d 1780, 1783 (Fed. Cir. 1992) (the examiner can satisfy the burden of showing obviousness of the combination “only by showing some objective teaching in the prior art or that knowledge generally available to one of ordinary skill in the art would lead that individual to combine the relevant teachings of the references”).

With respect to Lee's application, neither the examiner



nor the Board adequately supported the selection and combination of the Nortrup and Thunderchopper references to render obvious that which Lee described. The examiner's conclusory statements that "the demonstration mode is just a programmable feature which can be used in many different device[s] for providing automatic introduction by adding the proper programming software" and that "another motivation would be that the automatic demonstration mode is user friendly and it functions as a tutorial" do not adequately address the issue of motivation to combine. This factual question of motivation is material to patentability, and could not be resolved on subjective belief and unknown authority. It is improper, in determining whether a person of ordinary skill would have been led to this combination of references, simply to "[use] that which the inventor taught against its teacher." W.L. Gore v. Garlock, Inc., 721 F.2d 1540, 1553, 220 USPQ 303, 312-13 (Fed. Cir. 1983). Thus the Board must not only assure that the requisite findings are made, based on evidence of record, but must also explain the reasoning by which the findings are deemed to support the agency's conclusion.

Deferential judicial review under the Administrative Procedure Act does not relieve the agency of its obligation to develop an evidentiary basis for its findings. To the contrary, the Administrative Procedure Act reinforces this obligation. See, e.g., Motor Vehicle Manufacturers Ass'n v. State Farm Mutual Automobile Ins. Co., 463 U.S. 29, 43 (1983) ("the agency must examine the relevant data and articulate a satisfactory explanation for its action including a 'rational connection between the facts found and the choice made.'") (quoting Burlington Truck Lines v. United States, 371 U.S. 156, 168 (1962)); Securities & Exchange Comm'n v. Chenery Corp., 318 U.S. 80, 94 (1943) ("The orderly function of the process of review requires that the grounds upon which the administrative agency acted are clearly disclosed and adequately sustained.").

In its decision on Lee's patent application, the Board rejected the need for "any specific hint or suggestion in a particular reference" to support the combination of the Nortrup and Thunderchopper references. Omission of a relevant factor required by precedent is both legal error and arbitrary agency action. See Motor Vehicle Manufacturers, 463 U.S. at 43 ("an agency rule would be arbitrary and capricious if the agency . . . entirely failed to consider an important aspect of the problem"); Mullins v. Department of Energy, 50 F.3d 990, 992 (Fed. Cir. 1995) ("It is well established that agencies have a duty to provide reviewing courts with a sufficient explanation for their decisions so that those decisions may be judged against the relevant statutory standards, and that failure to provide such an explanation is grounds for striking down the action."). As

discussed in National Labor Relations Bd. v. Ashkenazy Property Mgt. Corp., 817 F.2d 74, 75 (9th Cir. 1987), an agency is “not free to refuse to follow circuit precedent.”

The foundation of the principle of judicial deference to the rulings of agency tribunals is that the tribunal has specialized knowledge and expertise, such that when reasoned findings are made, a reviewing court may confidently defer to the agency's application of its knowledge in its area of expertise. Reasoned findings are critical to the performance of agency functions and judicial reliance on agency competence. See Baltimore and Ohio R. R. Co. v. Aberdeen & Rockfish R. Co., 393 U.S. 87, 91-92 (1968) (absent reasoned findings based on substantial evidence effective review would become lost “in the haze of so-called expertise”). The “common knowledge and common sense” on which the Board relied in rejecting Lee's application are not the specialized knowledge and expertise contemplated by the Administrative Procedure Act. Conclusory statements such as those here provided do not fulfill the agency's obligation. This court explained in Zurko, 258 F.3d at 1385, 59 USPQ2d at 1697, that “deficiencies of the cited references cannot be remedied by the Board's general conclusions about what is 'basic knowledge' or 'common sense.’” The Board's findings must extend to all material facts and must be documented on the record, lest the “haze of so-called expertise” acquire insulation from accountability. “Common knowledge and common sense,” even if assumed to derive from the agency's expertise, do not substitute for authority when the law requires authority. See Allentown Mack, 522 U.S. at 376 (“Because reasoned decisionmaking demands it, and because the systemic consequences of any other approach are unacceptable, the Board must be required to apply in fact the clearly understood legal standards that it enunciates in principle . . . .”)

The case on which the Board relies for its departure from precedent, In re Bozek, 416 F.2d 1385, 163 USPQ 545 (CCPA 1969), indeed mentions “common knowledge and common sense,” the CCPA stating that the phrase was used by the Solicitor to support the Board's conclusion of obviousness based on evidence in the prior art. Bozek did not hold that common knowledge and common sense are a substitute for evidence, but only that they may be applied to analysis of the evidence. Bozek did not hold that objective analysis, proper authority, and reasoned findings can be omitted from Board decisions. Nor does Bozek, after thirty-two years of isolation, outweigh the dozens of rulings of the Federal Circuit and the Court of Customs and Patent Appeals that determination of patentability must be based on evidence. This court has remarked, in Smiths Industries Medical Systems, Inc. v. Vital Signs, Inc., 183 F.3d 1347, 1356, 51 USPQ2d 1415, 1421 (Fed.

Cir. 1999), that Bozek's reference to common knowledge “does not in and of itself make it so” absent evidence of such knowledge.

In re Lee, 61 U. S. P. Q. 2d 1430, 1433-1435, (Fed. Cir. Jan. 18, 2002).

Under Lee, in order to establish a *prima facie* case of obviousness, three basic criteria must be met. First, there must be some suggestion or motivation, either in the references themselves or in the knowledge generally available to one of ordinary skill in the art, to modify the reference or to combine reference teachings. Second, there must be a reasonable expectation of success. Finally, the prior art reference (or references when combined) must teach or suggest all the claim limitations. The teaching or suggestion to make the claimed combination and the reasonable expectation of success must both be found in the prior art, and not based on applicant's disclosure. *In re Vaeck*, 947 F.2d 488, 20 USPQ2d 1438 (Fed. Cir. 1991). See M.P.E.P. Section 2143 - Section 2143.03 for decisions pertinent to each of these criteria. M.P.E.P. § 2142.

[V]irtually all [inventions] are combinations of old elements.” *Environmental Designs, Ltd. v. Union Oil Co.*, 713 F.2d 693, 698, 218 U.S.P.Q. 865, 870 (Fed. Cir. 1983); *see also Richdel, Inc. v. Sunspool Corp.*, 714 F.2d 1573, 1579-80, 219 U.S.P.Q. 8, 12 (Fed.Cir.1983) (“Most, if not all, inventions are combinations and mostly of old elements.”). An examiner may often find every element of a claimed invention in the prior art. If identification of each claimed element in the prior art were sufficient to negate patentability, very few patents would ever issue. Furthermore, rejecting patents solely by finding prior art corollaries for the claimed elements would permit an examiner to use the claimed invention itself as a blueprint for piecing together elements in the prior art to defeat the patentability of the claimed invention. Such an approach would be “an illogical and inappropriate process by which to determine patentability.

In re Rouffet, 149 F.3d 1350, 1357, 47 USPQ2d 1453, 1457-58 (Fed. Cir. 1998), citing Sensonics, Inc. v. Aerosonic Corp., 81 F.3d 1566, 1570, 38 USPQ.2d 1551, 1554 (Fed. Cir. 1996).

Neither LeCompte nor Arm discloses or suggests the desirability of combining the elements from the two references. The Examiner presented no findings, nor did the Examiner explain any reason, that a skilled artisan, without knowledge of the present invention, would have selected the references and combined them as the Examiner claimed. It appears that the only suggestion to combine the references is the present invention. It is reasonable to infer that the Examiner selected these references with the assistance of hindsight based on Applicants' claims. Courts forbid the use of hindsight in the selection of

references that comprise the case of obviousness. In re Rouffet, 149 F.3d at 1358. See In re Gorman, 933 F.2d 982, 986, 18 U.S.P.Q.2d 1885, 1888 (Fed. Cir. 1991). Lacking a motivation to combine references, the Examiner did not establish a *prima facie* case of obviousness.

Without providing any motivation to combine the references, without any finding of reasonable expectation of success, and without proving the references taught all the claim limitations, again the Examiner has not made a *prima facie* case of 35 U. S. C. § 103 obviousness.

Accordingly, Applicants submit that the 35 U. S. C. § 103 rejection of claims 1-14 is overcome. Favorable consideration, culminating in allowance of claims 1-14 is respectfully requested.

The Examiner rejected claims 14 and 24-26 under 35 U. S. C. § 103. The Examiner relied upon the combination of Gruber U. S. Patent 5,505,566 (hereinafter Gruber) and LeCompte to support this rejection. The Examiner takes the position that

Gruber shows a dispenser for dispensing pulverulent material including an opening (powder coating gun 14b), a conduit (15, 14, 14a) through which the pulverulent material is transported from (sic--from) a source to the opening, the conduit including a first reducer section (fig 1) and a first expander section (fig 1), the first expander section being downstream in the flow of material from the first reducer section, but does not show a second reducer section and a second expander section. However, LeCompte discloses a coating gun including an outlet (44), a reducer section (30, 28) and an expander section (26, 36) with the expander section being downstream in the flow of material from the reducer section. It would have been obvious to one of ordinary skill in the art at the time of the applicant's (sic) invention to substitute the coating gun of LeCompte for the coating gun (14b) of Gruber, putting the reducer section (the second reducer section) of LeCompte downstream of the first expander section of Gruber, in order to discharge an even coat of pulverulent material from the dispenser with the rectangular cross-section of LeCompte's coating gun (figure 3).

Again, LeCompte is not analogous art. The above discussion concerning this infirmity of LeCompte is incorporated here by reference.

Further, the Examiner provides no reasoning why combining Gruber and LeCompte in any manner, let alone the manner suggested by the Examiner, would be a good idea, or why anyone would be motivated to do it. Gruber relates to a venturi pump for pumping powder coating material from a source 15a via a venturi pump 12-16 to a powder

coating gun 14b. LeCompte teaches a nozzle construction for sand blasting for "removing rust, scale, old paint, debris and contamination from a surface prior to cleaning, repainting or applying a similar surface coating."

LeCompte teaches away from combination with Gruber, since in at least one embodiment of LeCompte illustrated in LeCompte's Fig. 7, LeCompte adds a non-converging/diverging "flow straightener" 52 upstream of LeCompte's converging/diverging nozzle, rather than provide two converging/diverging sections to render the distribution and flow of particles more uniform:

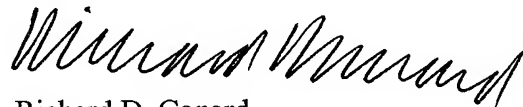
"Flow straightener 52 attaches to improved blast nozzle 10 by threads 46. Flow straightener 52 has threads 54 formed on the exterior at its opposite end which attach to coupling 14. Seal element 55 is disposed between abrasive blast supply hose 12 and flow straightener 52 to ensure proper sealing. The details of the construction of coupling 14 and its attachment to abrasive blast supply hose 12 are the same as in the original embodiment. Flow straightener 52 has a square cross section interior 56 which is sized to match the square inlet portion 22 of blast nozzle liner 16. Flow straightener 52 is designed to be of sufficient length to allow the propellant fluid, air, and the abrasive particle mixture, typically sand, to attain an even distribution across the square cross section interior 56 after having left the round cross section abrasive blast supply hose 12."

LeCompte, col. 4, lines 31-46.

Accordingly, Applicants submit that the 35 U. S. C. § 103 rejection of claims 14 and 24-26 is also overcome. Favorable consideration, culminating in allowance of claims 1-14 and 24-26 is respectfully requested.

The Commissioner is hereby authorized to charge any fees which may be due to constitute this a timely response to the September 22, 2006 official action to Applicants' undersigned counsel's deposit account 10-0435 with reference to file number 3030-72219. A duplicate copy of this authorization is enclosed for that purpose.

Respectfully submitted,



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